



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

MF

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/057,861	04/09/98	SACHS	H 12172004530

TM31/1024  
TOWNSEND AND TOWNSEND AND CREW LLP  
TWO EMBARCADERO CENTER 8TH FLOOR  
SAN FRANCISCO CA 94111-3834

EXAMINER

VU, V

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 10/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/057,861

Applicant(s)

Sachs

Examiner

V. Vw

Group Art Unit

2154

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE —3— MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 7-5-00 & 8-7-00 (IDS)
- ☒ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 131-146 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 131-146 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
  - ☐ received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 17
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

**DETAILED ACTION**

1. This office action responds to applicant supplemental amendment and request for interference filed 7/5/2000. Claims 9-130 have been canceled. New claims 131-146 have been added.

2. An interference cannot be initiated since a prerequisite for interference under 37 CFR 1.606 is that the claim be patentable to the applicant subject to a judgement in the interference.

**Non-Art Rejection:**

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 131-138 and 142-146 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at

the time the application was filed, had possession of the claimed invention.

Specifically, the present specification fails to disclose providing a separate template field within the instruction bundle where the template field specifying a mapping of the instructions to the execution units. In stead of having one separate template field grouped together with the instructions, the present specification teaches adding prefix bits to each instruction (see page 6, line 35 - col 7, line 5). The prefix bits (pipeline identifiers) will be used by the decoders (170-177) to route each instruction to an appropriate execution unit (see page 10, lines 1-25). Thus, these pipeline identifiers are distributed and attached to each instruction in the instruction bundle. They are not stored in a separate template field which is grouped together with the instructions. In another embodiment, the present specification also teaches keeping the pipeline identifiers in a separate smaller cache in stead of bundling with each instruction (see page 7, lines 10-14). Again, the use of a separate template field grouped together with the instructions in the instruction bundle was not disclosed or suggested anywhere in the present specification:

**Art Rejection:**

5. Claims 139-141 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by an article entitled "Predecoding Mechanism for Superscalar Architecture" by Minagawa et al, hereafter Minagawa (cited by applicant).

Minagawa discloses a processor comprising:

- a) an inherent register file (not shown) having a plurality of registers,
- b) a plurality of execution units (F0-Fn, fig. 4), each execution unit being one of a plurality of types,
- c) an instruction cache (fig. 4) for storing a frame of multiple instructions to be issued/executed in parallel (see page 24, col 2, lines 4-11), each instruction having a first routing data (Rn, fig. 2) for specifying the routing of instructions to the execution units, and a second routing data (Pn, fig. 2) for specifying instructions that are executed sequentially within the frame (see page 22, col 1, lines 7-15).

**Conclusion:**

6. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE

Serial No. 09/057,861

EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Vu whose telephone number is (703) 305-9597. The examiner can normally be reached on Monday through Friday from 7:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An, can be reached on (703) 305-9678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.



VIET D. VU  
PRIMARY EXAMINER

Art Unit 2154  
10/12/00